INEEL Intelligence

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A high-level monthly briefing on operations and activities at the U.S. Department of Energy's Idaho National Engineering and Environmental Laboratory – Home of Science and Engineering Solutions. Work at the lab advances the Department's strategic goals in the areas of energy, environment, defense and science.

■ ENERGY – INEEL Reactor Reaches Milestone

Representatives from throughout the world met earlier this month to celebrate a 40-year milestone for the INEEL's Advanced Test Reactor and look to future uses for the facility. About 70 representatives attended the ATR Users Group meeting to discuss nuclear energy options and successful results from the ATR. Construction first began on the test reactor 40 years ago and it has been 37 years since it first went critical. Over the years, the ATR has produced much of the world's data on material and fuel response to the high radiation environments of power reactors. Reactor managers say the ATR still has many years of service to come. The reactor has a growing customer base, will play a key part in developing the next generation of nuclear power reactors, and will contribute to this nation's space exploration efforts.

■ ENVIRONMENT – Demolition of Unneeded Structures Continues

Crews with Bechtel BWXT Idaho's Idaho Completion Project have started the demolition of the north and east office wings of an old laboratory complex at the Idaho Nuclear Technology and Engineering Center and will begin to demolish the remainder of the facility in coming weeks. Demolition of the Research and Development Laboratory Process Improvement Facility (CPP-637) at the Idaho Nuclear Technology and Engineering Center represents part of an approximately seven-year accelerated demolition of obsolete buildings at INTEC and other locations across the site. Project officials say getting rid of structures like this reduces maintenance costs and frees up money that can be used to quicken the pace of other high priority cleanup activities.

■ DEFENSE – Idaho Inventors Receive Patent for Security Technology

Twelve years after the portable isotopic neutron spectroscopy system, or PINS, was recognized as one of the nation's outstanding technologies by R&D Magazine, its inventors have received U.S. patent no. 6,791,089 for their PINS Chemical Identification Software. PINS is used by the U.S. Army worldwide to determine the contents of shells or other containers potentially holding chemical warfare substances, without opening or otherwise disturbing the vessels. This past year, PINS was used in Maryland when old munitions were discovered in Baltimore, temporarily closing an interstate and Baltimore Harbor. In 2000, the Idaho Completion Project also used the portable system to confirm the contents of several decades-old containers excavated during cleanup work at the INEEL.

■ SCIENCE – Lab Announces Another Key Hire

Kemal Pasamehmetoglu, the National Technical Director for Fuels for DOE's Advanced Fuel Cycle Initiative, is one of the newest members of the INEEL research community. "We are very excited to have a person of his caliber and expertise join us to assist in advancing our work in nuclear fuels development and testing," said Kathy McCarthy, INEEL Nuclear Science and Engineering Director. Pasamehmetoglu and the Advanced Fuel Cycle Initiative are tasked with investigating the potential of advanced technologies to achieve dramatic reductions in the volume and toxicity of nuclear waste.

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